CLAIMS

WHAT IS CLAIMED IS:

1. A method of generating a machine identifier comprising:

allocating a file comprising one or more randomly-located memory blocks, each of the blocks having an object identifier based on the block's location in a memory; and

creating a machine identifier based on the locations of the one or more memory blocks.

2. The method of claim 1, further comprising:

allocating a plurality of first blocks;

randomly de-allocating a subset of said plurality of first blocks, whereby the de-allocated blocks become available for allocation, and wherein at least some of the randomly-located memory blocks are selected from the de-allocated blocks.

3. The method of claim 2, wherein the method is performed in a system having a database module that stores database records, wherein said database records and said memory blocks are allocated from a common pool of memory, and wherein said act of allocating a plurality of first blocks comprises using said database module to create a plurality of records.

4. The method of claim 2, wherein said act of allocating a plurality of first blocks comprises creating a plurality of records contiguously located in said memory.

5. The method of claim 1, further comprising:

transmitting said machine identifier to a remote computing device which creates a program based on said machine identifier; and

receiving said program from said remote computing device and storing said program in said file, said program being adapted to check that the object identifiers of the memory blocks of which the file is comprised are consistent with said machine identifier.

6. The method of claim 5, wherein said program operates to decrypt encrypted content when said program is running on a device having a particular machine identifier, and wherein said program denies decryption of said encrypted content if the object identifiers of said memory blocks of which the file is comprised are inconsistent with said machine identifier.

7. The method of claim 5, wherein said machine identifier comprises a concatenation of the object identifiers of said memory blocks of which the file is comprised, wherein the machine identifier is embedded in the program, and wherein the program checks whether the machine identifier is consistent with the object identifiers by concatenating the object identifiers of the file in which the program is stored and comparing the concatenated object identifiers to the embedded machine identifier.

8. A computer-readable medium having stored thereon computer-readable instructions that:

allocate a file in memory, said file comprising at least a first block and a second block, said first block being associated with a first randomized value representing a first location in memory where said first block is located and said second block being associated with a second randomized value representing a second location in memory wherein said second block is located; and

generate a machine identification based on said first value and said second value.

9. The computer-readable medium of claim 8, wherein said machine identification is generated by concatenating at least said first and second values.

10. The computer-readable medium of claim 8, having stored thereon further computer-readable instructions that receive a program from a remote computing device and store said program in said file, said program being adapted to check that said machine identification is consistent with the values associated with said first and second blocks.

11. The computer-readable medium of claim 10, having stored thereon further computer-readable instructions that receive said first value and said second value from a list of a plurality of available locations in memory.

12. The computer-readable medium of claim 11, having stored thereon further computer-readable instructions that randomize said list by adding and deleting records selected at random by a random number-generating module.

13. The computer-readable medium of claim 12, having stored thereon further computer-readable instructions that wait a specified period of time before allocating said file.

14. A system for generating a machine identification for a computing device comprising a file system that allocates storage blocks, each of the blocks having a block identifier that represents the location of a block in a memory of the computing device, the file system maintaining a list of unused locations in the memory that may be allocated for storage of information, the computing device having a database module that allocates memory in which to store database records, that de-allocates records upon

request, and that places de-allocated records on the list whereby the de-allocated records may be reallocated for storage of information, the system comprising:

a database creation module that uses said database to allocate a number of dummy records;

a random number generator that selects dummy records to be deleted; and

a machine identification generator that allocates a file comprising a plurality of blocks allocated from the list of unused locations in the memory and generates a machine identification based on the block identifiers for the blocks of which the file is comprised.

15. The system of claim 14, further comprising:

a software acquisition module that uploads the machine identification to a server which creates a program based on the machine identification and which stores the program in the file, the machine identification being embedded within the program, the program containing instructions which verify that the machine identification embedded within the program is consistent with the block identifiers of the blocks comprising the file in which the program is stored.

16. The system of claim 15, wherein the machine identification is embedded in the program in an obfuscated form.

17. The system of claim 14, wherein said machine identification generator generates the machine identification by concatenating the block identifiers for the blocks of which the file is comprised.